From: "Distler, Kenneth" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE;GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BC5B2ED56BEA417D8EC07A448138E7C6-DISTLER,KENNETH>

To: Lloyd

Lisa

CC:

Date: 6/7/2013 12:27:01 PM

Subject: FW: States using AERMOD plume depletion algorithm

From: Matichuk, Rebecca
Sent: Friday, June 07, 2013 12:24 PM
To: Ronn Smith
Cc: Distler, Kenneth; Bradley Werling; John Mays
Subject: RE: States using AERMOD plume depletion algorithm

Hi Ronn,

Thank you for providing the additional information. I will let you know when I have had time to follow-up with CDPHE.

Regards,
Rebecca
303-312-6867

From: Ronn Smith [mailto:rsmith@imlinc.com]
Sent: Friday, June 07, 2013 11:09 AM
To: Matichuk, Rebecca
Cc: Distler, Kenneth; Bradley Werling; John Mays
Subject: States using AERMOD plume depletion algorithm

Rebecca,

The reference to modeling PM10 deposition for the Alton Coal Lease EIS appears in:

APPENDIX K. AIR RESOURCES IMPACT ASSESSMENT TECHNICAL REPORT FOR THE ALTON COAL LEASE BY APPLICATION DRAFT ENVIRONMENTAL IMPACT STATEMENT (September 2010)

Page 9 states, “deposition was only considered for assessing the final PM10 modeled ambient air impacts.” Page 10 states, “the primary pollutants of concern are fugitive dust.” Page 4 describes typical fugitive dust sources from mining operations.

An email I received from the Colorado modeler (referred to me by Chuck Machovek at CDPHE) is replicated below, with the names of three projects for which particle deposition was modeled in AERMOD.

Another project (that I haven’t mentioned) is in eastern Oregon: Fugitive Dust Modeling with AERMOD For PM10 Emissions from a Municipal Waste Landfill (2007). The primary emission source is haul road traffic transporting waste material. This document describes an iterative process not unlike the one we’ve undergone with Dewey-Burdock, whereby Oregon DEQ worked with the Landfill owners to refine both the emissions inventory and the modeling protocol. Page 7 lists plume depletion as one of the options implemented. Page 14 discusses the importance of considering PM10 deposition and plume depletion when modeling fugitive dust.

I believe you already have my references to the Salt River/Mariposa study in Arizona, the guidance from the New Mexico Air Quality Bureau, and the communication with Wyoming DEQ, all of which infer regulatory acceptance of the deposition/plume depletion option in AERMOD.

Best regards,
Ronn

There are three recent applications received by this Division whose modeling analyses used the particle deposition option:

- Lafarge - Gypsum Ranch Pit

- Oxbow Mining - Elk Creek Mine

- Bowie Resources - Bowie N.2 Mine (currently under review)

I hope this helps.

Rosendo

Rosendo Majano
Air Quality Modeler
Air Pollution Control Division
Colorado Department of Public Health and Environment
303-692-3115 | rosendo.majano@state.co.us